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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,231	10/25/2000	Masaru Ohkubo	00407.00004	2893

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BANNER & WITCOFF, LTD.
1001 G STREET, N.W.
WASHINGTON, DC 20001-4597

EXAMINER

NGUYEN, THANH T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 06/25/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/695,231

Applicant(s)

OHKUBO ET AL.

Examiner

Thanh T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____



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Detailed Office Action

1. This action is in response to the amendment filed April 8, 2004.
2. Claims **16-20** newly added.
3. Claims 1-20 are pending.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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5. Claims 1, 4, 6-16, 18-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Miyata et al. (USPN 6,339,726– Date of Patent: January 15, 2002, herein referred to as “Miyata”).

6. As to claim 1, Miyata teaches the invention as claimed, including a control system for an automatic vending machine including a controlled device, said control system comprising: a terminal control unit connected to said controlled device for controlling said controlled device in accordance with a control program (Fig.3, Control Unit, Sub-control Unit a 202A); and a main control unit connected to said terminal control unit through a transmission path for controlling said terminal control unit through communication with said terminal control unit, said main control unit including transfer means for transferring a signal with a new control program to said terminal control unit through said transmission path (col.1, lines 15-20 and col.2, lines 1-19); said terminal control unit comprising: memorizing means for memorizing the first-mentioned control program as a memorized control program (col.2, lines 3-19); and rewriting means connected to said memorizing means and said transfer means for rewriting said memorized control program into said new control program (col.2, line 65 to col.3, line 2 and col.2, lines 29-34).

7. As to claim 4, Miyata teaches the invention as claimed, wherein said automatic vending machine further includes another controlled device, said control system further comprising another terminal control unit connected to said other controlled device, said main control unit being connected to said other terminal control unit, said transfer rate control means being connected to said main control unit and controlling said main control unit to suppress the communication between said other control unit and said main control unit when said control

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program is transferred from said main control unit to the first mentioned terminal control unit (Fig.3, Control Unit connect to other control device).

8. As to claim 6, Miyata teaches the invention as claimed, wherein said main control unit comprises input means connected to said transfer means for supplying said new control program to said transfer, means (col.4, lines 34-38).

9. As to claim 7, Miyata teaches the invention as claimed, wherein said input means is adapted to use of a removable storage medium memorizing said new control program, said input means reading said new control program from said removable storage medium to supply said new control program to said transfer means (col.4, lines 47-50).

10. As to claim 8, Miyata teaches the invention as claimed, wherein said input means is connected to a communication line for transmitting said new control program, said input means receiving said new control program through said communication line to supply said new control program to said transfer means (col.2, line 65 to col.3, line 2).

11. As to claim 9, Miyata teaches the invention as claimed, wherein said main control unit comprises judging means connected to said transfer means for judging in response to said new control program whether or not a rewrite of said memorized control program is to be executed, said judging means permitting said transfer means to transmit said new control program towards said terminal control unit when said rewrite is to be executed (col.3, lines 3-20).

12. As to claim 10, Miyata teaches the invention as claimed, further comprising judging means connected to said transfer means for judging with reference to said signal whether or not said memorized control program should be rewritten, said judging means permitting said

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rewriting means to access said memorizing means when said memorized control program should be rewritten (col.4, lines 35-38).

13. As to claim 11, Miyata teaches the invention as claimed, wherein said judging means judges whether or not said signal includes said new control program directed to said terminal control unit, said judging means permitting said rewriting means to access said memorizing means only when said signal includes said new control program directed to terminal control unit (col.4, lines 35-38).

14. As to claim 12, Miyata teaches the invention as claimed, wherein said judging means compares version information of said new control program with version information of said memorized control program to permit said rewriting means to access said memorizing means only when the version information of said new control program is updated (col.4, lines 47-50).

15. As to claim 13, Miyata teaches the invention as claimed, wherein said judging means is included in said main control unit (Fig.3, Main control Unit 1).

16. As to claim 14, Miyata teaches the invention as claimed, wherein said judging means is included in said terminal control unit (Fig.3, Sub-control unit A 202A).

17. As to claim 15, Miyata teaches the invention as claimed, wherein further comprising indicating means connected to said rewriting means for indicating execution of rewriting said memorized control program operation (col.4, lines 39-52).

18. As to claim 16, Miyata teaches the invention as claimed, including a control system for an automatic vending machine including a controlled device said control system comprising: a terminal control unit connected to said controlled device for controlling said controlled device in accordance with a control program (Fig.3, Control Unit, Sub-control Unit 202A) and a main

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control unit connected to said terminal control unit through a transmission path for controlling said terminal control unit through communication with said terminal control unit, said main control unit including a transfer device for transferring a signal with a new control program to said terminal control unit through said transmission path (col.1, lines 15-20 and col.2, lines 1-19); said terminal control unit comprising: a memorizing device for memorizing the first-mentioned control program as memorized control program (col.2, lines 3-19); and a rewriting device connected to said memorizing device and said transfer device for rewriting memorized control program into said new control program (col.2, lines 15-19).

19. As to claim 18, Miyata teaches the invention as claimed, wherein said main control unit comprises an input device connected to said transfer device for supplying said new control program to said transfer device (col.4, lines 11-28).

20. As to claim 19, Miyata teaches the invention as claimed, wherein said main control unit comprises a judging device connected to said transfer device for judging in response to said new control program whether or not a rewrite of said memorized control program is to be executed, said judging device permitting said transfer device to transfer device to transmit said new control program towards said terminal control unit when said rewrite is to be executed (col.1, lines 25-55).

21. As to claim 20, Miyata teaches the invention as claimed, further comprising a judging device connected to said transfer device for judging with reference to said signal whether or not said memorized control program should be rewritten, said judging device permitting said rewriting device to access said memorizing device when said memorized control program should be rewritten (col.2, lines 15-19).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 2,3,5, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable Miyata et al., (hereinafter Miyata) U.S. Patent No. 6,339,726 in view of Alexander, Jr et al., (hereinafter Alexander Jr) U.S. Patent No. 6,625,158.

24. As to claim 2, Miyata does not explicitly disclose increasing a data transfer rate. However, Alexander discloses increasing a data transfer rate (col.2, lines 38-55, and col.11, lines 7-14). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teaching of Miyata with the teaching of Alexander in order to reduce the costs significantly.

25. As to claim 3, Miyata fails to explicitly teach the communication speed increased. However, Alexander discloses the communication speed increased (col.2, lines 38-55, and col.11, lines 7-14). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teaching of Miyata with the teaching of Alexander in order to reduce the costs significantly.

26. As to claim 5, Miyata and fail to explicitly teach using of a normal communication

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protocol, switching said normal communication protocol into a special communication protocol, However, Alexander discloses using of a normal communication protocol, switching said normal communication protocol into a special communication protocol (col.2, lines 38-55). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teaching of Miyata with the teaching of Alexander in order to provide enhanced performance in communications involving multiple emulated data communications networks.

27. Claim 17 has similar limitations as claim 2; therefore, it is rejected under the same rationale.

Response to Arguments

28. Applicant's arguments filled on April 8, 2004 have been fully considered, however they are not persuasive because of the following reasons:

29. Applicants argue that Miyata does not teach transferring control programs from the main control unit to the sub-control units. In response to Applicant's argument, the Patent Office maintain the rejection because Miyata does teach transferring control programs from the main control unit to the sub-control units as shown in col.4, lines 24-27, and col.3, lines 45-50. Clearly show transferring a control program from the main control unit to the sub-control units.

30. Applicants argue that Miyata does not teach replacing a control program in the terminal control unit with a new control program. In response to Applicant's argument, the Patent Office maintain the rejection because Miyata does teach replacing a control program in the terminal control unit with a new control program as shown in col.1, lines 38-41, also lines

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54-55, and col.4, lines 1-6. Clearly show replacing a control program in terminal control unit with a new control program.

31. Applicants argue that Miyata does not teach a rewriting in the terminal control units. In response to Applicant's argument, the Patent Office maintain the rejection because Miyata does teach a rewriting in the terminal control units as shown in col.2, lines 15-19. Clearly show rewriting program in the terminal control units.

32. Therefore, the Examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, and 16. Claims 2-15, and 17-20 are also rejected at least by the virtue of their dependency on independent claims and by other reasons set forth in the previous office action [see paper no. 3].

33. Accordingly, claims 1-20 are respectfully rejected.

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

35. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(703) 305-7982**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 4:30 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to **(703) 872-9306**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Bill Cuchlinski, may be reached at **(703) 308-3873**.

TTN

June 21, 2004



WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600